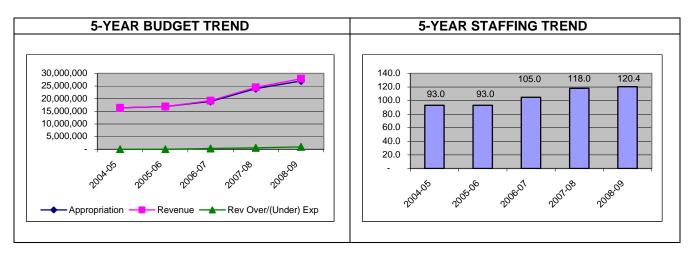
# **Network Services**

#### **DESCRIPTION OF MAJOR SERVICES**

The Network Services division provides for the design, operation, maintenance and administration of the largest county-operated telecommunications phone network in the country; the county's Regional Public Safety Radio System that integrates all countywide sheriff, police and fire emergency radio dispatch capabilities; the paging system that consists of over 7000 pagers; and the Wide Area Network (WAN) that securely joins approximately 18,000 county users together for the efficient use of technology. The Information Services Department (ISD) manages a countywide microwave system (64 sites) that helps provide transport capabilities for each of the individual systems listed above.

# **BUDGET HISTORY**



# PERFORMANCE HISTORY

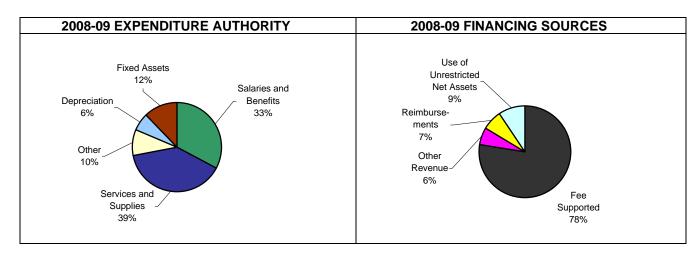
	2004-05 Actual	2005-06 Actual	2006-07 Actual	2007-08 Modified Budget	2007-08 Estimate
Appropriation	17,490,016	17,033,607	19,377,032	24,369,333	23,119,398
Departmental Revenue	17,077,134	18,937,846	19,298,549	26,633,447	27,718,846
Revenue Over/(Under) Exp	(412,882)	1,904,239	(78,483)	2,264,114	4,599,448
Budgeted Staffing				119	
Fixed Assets	627,582	1,592,092	1,921,570	4,589,175	4,081,980
Unrestricted Net Assets Available at Year End	4,969,242	7,278,886.00	5,919,423		7,583,957

In 2007-08, estimated appropriation is less than modified budget due to vacant position salary savings resulting from difficulties in recruiting for numerous information technology and radio positions. Departmental revenue is projected over budget as a result of an increase in the demand for data cabling services, communications installations and repairs, electronic maintenance services, mobile data computer services, and Virtual Private Network (VPN) access.



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# **ANALYSIS OF PROPOSED BUDGET**



GROUP: Administrative/Executive
DEPARTMENT: Information Services
FUND: Network Services

BUDGET UNIT: IAM ALL FUNCTION: General ACTIVITY: Other General

					2007-08	2008-09	Change From 2007-08
	2004-05	2005-06	2006-07	2007-08	Final	Proposed	Final
	Actual	Actual	Actual	Estimate	Budget	Budget	Budget
Appropriation							
Salaries and Benefits	7,497,144	7,564,905	8,558,782	9,753,138	10,930,034	10,969,991	39,957
Services and Supplies	7,681,519	8,375,805	9,453,580	11,437,601	11,112,207	12,746,084	1,633,877
Central Computer	49,040	58,296	63,274	81,084	81,084	101,246	20,162
Travel Other Charges	- 6,043	- 370	-	- 74	-	214,185	214,185
Transfers	1,715,756	1,819,285	2,375,860	2,457,156	2,646,216	3,044,149	397,933
Total Exp Authority	16,949,502	17,818,661	20,451,496	23,729,053	24,769,541	27,075,655	2,306,114
Reimbursements	(1,233,251)	(1,328,090)	(1,847,679)	(1,856,721)	(2,059,013)	(2,366,138)	(307,125)
Total Appropriation	15,716,251	16,490,571	18,603,817	21,872,332	22,710,528	24,709,517	1,998,989
Depreciation	766,865	543,036	773,215	1,147,066	1,147,066	2,146,707	999,641
Operating Transfers Out	1,006,900		<del></del> -	100,000	100,000	143,407	43,407
Total Requirements	17,490,016	17,033,607	19,377,032	23,119,398	23,957,594	26,999,631	3,042,037
Departmental Revenue							
Fines and Forfeitures	1,455	-	-	-	-	-	-
Use Of Money and Prop	15	47,823	(22,460)	53	30,000	-	(30,000)
Realignment	-	-	-	-	-	-	-
State, Fed or Gov't Aid Current Services	- 17.039.043	- 18,847,360	- 19,303,150	3,916 25.000.197	- 21,830,215	25.902.236	- 4,072,021
Other Revenue	18,073	42,663	17,859	145	21,630,213	25,902,230	4,072,021
Other Financing Sources	18,548	-12,000	-	2,714,535	2,657,810	2.032.392	(625,418)
Total Revenue	17,077,134	18,937,846	19,298,549	27,718,846	24,518,025	27,934,628	3,416,603
Rev Over/(Under) Exp	(412,882)	1,904,239	(78,483)	4,599,448	560,431	934,997	374,566
Budgeted Staffing					118.0	120.4	2.4
Fixed Assets					200,000	200,000	
Land Improvement to Structures	-	-	-	_	200,000	200,000 123,000	123,000
Equipment	317,393	1,547,480	1,921,570	4,041,980	- 2,645,492	3,640,858	995,366
Vehicles	-	-		40,000	40,000	120,000	80,000
L/P Equipment	310,189	44,612	<u> </u>				-
Total Fixed Assets	627,582	1,592,092	1,921,570	4,081,980	2,885,492	4,083,858	1,198,366

Salaries and benefits of \$10,969,991 fund 120.4 budgeted positions and are increasing by \$39,957 primarily resulting from the changes below, which are offset by decreases in costs for workers' compensation and call back pay, and a 0.6 reduction in budgeted overtime:

- Addition of 1.0 Network Services Supervisor to redistribute workload and increase efficiency;
- Addition of 1.0 Special Projects Leader to administer increased workload;



- 2007-08 approved midyear addition of 1.0 800 Megahertz (MHz) Analyst dedicated to the West End Communications Authority (WECA);
- Reclassification of 1.0 Network Services Supervisor, pay range 71 (\$75,026-\$95,992) to an Information Services (IS) Section Manager, pay range 77 (\$86,944-111,342) as recommended in the classification study completed by the Human Resources Department.

Services and supplies of \$12,746,084 primarily fund telephone and communications related costs and services, and are increasing by \$1,633,877 as a result of new on-going circuit costs associated with the WAN redesign and disaster recovery projects, and anticipated increases in the purchase of materials.

Travel is a new appropriation unit for 2008-09. The amount budgeted of \$214,185 reflects anticipated travel costs in the areas of private mileage, air travel, hotel, car rental, and conference fees for this budget unit. These costs were based on departmental analysis of past travel related expenses previously budgeted in the services and supplies appropriation unit.

Transfers of \$3,044,149 fund internal ISD administration and overhead costs, including costs associated with Human Resources functions. The \$397,933 increase is primarily due to increased internal overhead allocations resulting from the addition of new positions.

Reimbursements of \$2,366,138 represent reimbursement of administrative costs by individual service departments within the Network Services budget unit. The increase of \$307,125 is due to increases in internal overhead costs and the addition of new positions.

Depreciation of \$2,146,707 is increasing by \$999,641 per the department's depreciation schedule.

Operating transfers out of \$143,407 fund the reimbursement of one-time policy item funding to the general fund received for the disaster recovery project and estimated costs for the General Services Administration building Capital Improvement Project.

Current service revenue of \$25,902,236 includes the following services: telephone, voicemail, toll free 800 numbers, rack space rental, pagers, 800 MHz radio access/maintenance, communication installation labor, electronic maintenance labor, and WAN service charges. The increase of \$4,072,021 is the result of Board approved rate increases, anticipated service demand, and projected revenues from WECA radio access and maintenance services.

Other financing sources of \$2,032,392 represents general fund financing of the 800 MHz radio program. The decrease of \$625,418 is primarily due to the reduction of the one-time rate subsidy in 2007-08 for non-general fund departments and agencies using the 800 MHz radio system. The remaining decrease is attributed to the removal of one-time funding for the Disaster Recovery site.

Fixed Assets of \$4,083,858 include the following:

- Trunked Simulcast Conversion equipment \$325,000, which will be purchased from Motorola, a sole source vendor.
- Radio system equipment \$154,000, which will be purchased from Motorola, a sole source vendor.
- Radio system test equipment \$110,000.
- Upgrades for existing Private Branch eXchange (PBX) hardware \$300,000
- Upgrades of microwave system hardware \$148,089 and microwave test equipment \$75,000, to be purchased from Harris Microwave, a sole source vendor.
- Replacement of end-of-life network system hardware for the WAN \$368,769.
- Acquisition of land to install an additional microwave site to transmit 800 MHz radio and telephone signals, replacing an existing site that ISD was required to vacate \$200,000.
- Equipment in the event of catastrophic events/unplanned requirements to be expended only as needed -\$500,000.



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The increase of \$1,198,366 is primarily attributed to new equipment/improvement needs as detailed below:

- Electronic fork lift to replace obsolete equipment \$15,000.
- Switch replacements to replace obsolete equipment \$200,000.
- Simulcast Clocks to replace obsolete equipment \$120,000.
- The addition of one van and one vehicle \$80,000.
- E911 related equipment \$120,000.
- IP Trunking Conversion equipment \$100,000.
- Capital improvement costs to enhance ISD warehouse facilities \$60,000.
- Capital improvement costs for warehouse heat evacuation system \$63,000.
- Radio system enhancement \$251,000, which will be purchased from Motorola, a sole source vendor.
- WAN redesign equipment consisting of the following: backbone hardware \$375,000; data center switch enhancement \$84,000; WAN acceleration equipment \$100,000; Enterprise Wireless Solution \$45,000; and Cisco EOL 3662 replacement routers \$250,000.

PERFORMANCE MEASURES							
Description of Performance Measure	2006-07 Actual	2007-08 Projected	2007-08 Estimated	2008-09 Projected			
Percentage of Internet Protocol (IP) based connections established for telephone usage etween the County's main telephone locations.	0%	100%	100%	N/A			
Percentage of IP based connections established for telephone usage between the county's main elephone locations and outlying areas.	N/A	50%	0%	50%			
mplement Phased WAN backbone redesign to increase throughput capacity and redundancy.	N/A	N/A	N/A	50%			
Percentage of network that has been reconfigured to fully utilize new link and bandwidth.	0%	75%	10%	N/A			
Percentage of total projected RED radios online (1200 red channel radios).	96%	100%	100%	N/A			
mplement enhanced 911 calling line identification software and hardware.	N/A	N/A	N/A	100%			
Percentage of disaster recovery site completed.	N/A	100%	55%	100%			
nplementation of a mobile disaster recovery unit.	N/A	N/A	N/A	100%			

In support of ISD's goal to provide technology solutions that enable customers to better serve the citizens of the county, ISD met the performance measure to establish 100% of Internet Protocol (IP) based connections for telephone usage between the county's main telephone locations in 2007-08. In addition, the department's goal to establish IP based connections for telephone usage between the county's main telephone locations and outlying areas is estimated to be 50% completed in 2008-09.

ISD has replaced the 2007-08 performance measure "Percentage of network that has been reconfigured to fully utilize new link and bandwidth" with "Implement phased WAN backbone redesign," based on the results of an analysis to maximize the available bandwidth capacity throughout the county, to provide greater redundancy. In addition, all 1,200 red channel radios were deployed in 2007-08, enhancing 800 MHz operability between various valley-wide law enforcement agencies.

In order to be better prepared to manage the results of natural disasters ISD will complete the implementation of an alternative disaster recovery site and conduct integration disaster recovery testing to ensure proper functionality this year. In addition, the department plans to create a mobile disaster recovery unit to facilitate disaster relief efforts, and implement enhanced 911 calling line identification software and hardware solutions to enable dispatchers to accurately pinpoint where emergency callers are located, improving emergency response times to county campus locations.

